



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,330	07/14/2003	Chuanxiang Guo	MS1-2714US	6664
22801	7590	05/21/2008		
LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201			EXAMINER HAMZA, FARUK	
			ART UNIT 2155	PAPER NUMBER
			MAIL DATE 05/21/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/619,330

Applicant(s)

GUO ET AL

Examiner

FARUK HAMZA

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Response to Amendment

1. This action is responsive to the communication filed on March 11, 2008.
Claim 1 has been amended. Claims 1-24 are pending.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1 and 12 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 1 and 12 embrace or overlap two separate statutory classes of invention set forth in 35 U.S.C. 101 in a single claim. A claim of this type is precluded by the express language of 35 U.S.C. 101 which is drafted so as to set forth the statutory classes of invention in the alternative only. Each statutory class of claims must be considered independently on its own merits, see *Ex parte Lyell* (BdPatApp&Int) 17 USPQ2d 1548 *Ex Parte Lyell*.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims are ambiguously

constructed and indeterminate in scope because they purport to claim both a product and method.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, 6, 9-12, 14-16 and 20-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Kobayashi et al. (U.S. Patent Number 5,724, 346) hereinafter referred as Kobayashi.

Kobayashi teaches the invention as claimed including a mobile user station periodically searches for a connectable access point and stores the address of a connectable access point that has been found in a master-station management table (abstract).

As to claim 1, Kobayashi teaches a computer-readable medium having thereon computer-executable instructions for performing a method comprising: maintaining, local to a peer participating in one or more communication connection, a local connection translation table, the local connection translation table, for each connection of the one or more communication connections (abstract), comprising:

original connection parameters for the connection , the original connection parameters specifying an initial network attachment point associated with original establishment of the connection between the peer and a remote peer (abstract, Column 7, lines 6-Column 8, lines 18);

current connection parameters for the connection, the current connection parameters being different from the original connection parameters if the connection no longer uses the initial attachment point for incoming and outgoing data streams (abstract, Column 7, lines 45-Column 8, lines 18);

responsive to a data stream being at an active connection of the one or more communication connections, generating, by the peer, translated connection specifications from connection specifications of the data stream using the original connection parameters and the current connection parameters (abstract, Column 7, lines 6-Column 8, lines 18); and

communicating, by the peer, the data stream using the translated connection parameters to provide peer-to-peer communications (Column 7, lines 6-Column 8, lines 18).

Claims 12 and 20 do not teach or define any new limitations other than above claim 1. Therefore, 12 and 20 are rejected for similar reasons.

As to claim 2, Kobayashi teaches the tangible computer-readable medium of claim 1, wherein the local connection translation table further comprises at least one original connection parameter and at least one current connection

parameter for each active communication connection (abstract, Column 4, lines 18-44).

As to claim 3, Kobayashi teaches the tangible computer-readable medium of claim 2, wherein:

each active communication connection comprises at least one data stream, and each data stream comprises at least one connection parameter of the communication connection (Column 4, lines 18-65); and

the method further comprises:

for each communication connection having an outbound data stream, translating the at least one connection parameter of the outbound data stream to the corresponding at least one current connection parameter of the local connection translation table (Column 4, lines 18-65); and

for each communication connection having an inbound data stream, translating the at least one connection parameter of the inbound data stream to the corresponding at least one original connection parameter of the local connection translation table (Column 4, lines 18-65).

As to claim 6, Kobayashi teaches the computer-readable medium of claim 1, wherein the local connection translation table further comprises an original connection specification and a current connection specification for each active communication connection, and each connection specification comprises:

a local network attachment point identifier (abstract); and

a remote network attachment point identifier (abstract).

As to claim 9, Kobayashi teaches the computer-readable medium of claim 6, wherein maintaining the local connection translation table comprises:

as a result of a local network attachment point change, for each entry in the local connection translation table, updating the local network attachment point identifier of the current connection specification of the local connection translation table entry (abstract).

As to claim 10, Kobayashi teaches the computer-readable medium of claim 6, wherein the method further comprises receiving a Connection Update message, the Connection Update message comprising:

an original connection identifier of the peer (abstract); and
a new network attachment point identifier of the peer (abstract).

As to claim 11, Kobayashi teaches the computer-readable medium of claim 10, wherein maintaining the local connection translation table comprises:

as a result of receiving the Connection Update message, updating the remote network attachment point identifier of the current connection specification of the local connection translation table entry identified by the original connection identifier of the Connection Update message (abstract, Column 7, lines 6-Column 8, lines 18).

As to claim 14, Kobayashi teaches the computer-readable medium of claim 12, wherein the method further comprises publishing the local network attachment point change event to a virtual connectivity subscribe-notify service (Column 5, lines 3-15).

As to claim 15, Kobayashi teaches the computer-readable medium of claim 14, wherein publishing the local network attachment point change event to a virtual connectivity subscribe-notify service comprises sending a publish message from the local peer to the virtual connectivity subscribe-notify service, the publish message comprising: an identifier of the first network attachment point; and the identifier of the second network attachment point (Column 4, lines 18-65).

As to claim 16, Kobayashi teaches the computer-readable medium of claim 12, wherein the Connection Update message is sent between peers by being incorporated into a lower layer network protocol (abstract).

Claims 21-24 do not teach or define any new limitations other than above claims. Therefore, 21-24 are rejected for similar reasons.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4, 5, 7, 8, 17, 18, 19 rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi as applied above, and further in view of Angwin et al. (US Patent Number 6,167,450) hereinafter referred as Angwin.

As to claim 4, Kobayashi teaches the computer-readable medium of claim 3, wherein:

Kobayashi does not explicitly teach the claimed limitation of IP datagram and IP address.

However, Angwin teaches the claimed limitation of IP datagram and IP address (abstract, Column 5, lines 11-28, Column 10, lines 6-23).

It would have been obvious to the ordinary skill in the art at the time of the invention to modify Kobayashi by adding use of IP datagram and IP address, which would allow devices to identify and communicate with each other over the internet. One would be motivated to do such to enhance system's usability.

As to claim 5, Angwin teaches the computer-readable medium of claim 4, wherein: the at least one current connection parameter further comprises a current remote IP address; and translating the at least one connection parameter of the outbound data stream to the corresponding at least one current connection parameter of the local connection translation table further comprises replacing the destination address of each outbound IP datagram with the corresponding current remote IP address (abstract, Column 5, lines 11-28, Column 10, lines 6-23).

As to claim 7, Angwin teaches the computer-readable medium of claim 6, wherein each network attachment point identifier comprises:

an Internet protocol (IP) address (Column 5, lines 11-28); and

a transmission control protocol (Column 5, lines 11-28).

As to claim 8, Angwin teaches the computer-readable medium of claim 6, wherein each network attachment point identifier comprises:

an Internet protocol (IP) address (Column 5, lines 11-28); and
a user datagram protocol (UDP) port (Column 5, lines 11-28).

Claims 17-19 do not teach or define any new limitations other than above claims 4-8. Therefore, Claims 17-19 are rejected for similar reasons.

6. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi as applied above, and further in view of Huitema et al. (U.S. Patent Number 7,068,789) hereinafter referred as Huitema.

As to claim 13, Kobayashi teaches the tangible computer-readable data storage medium of claim 12.

Kobayashi does not explicitly teach the claimed limitation of cryptographic signature authenticating the identity of the local peer.

However, Huitema teaches the claimed limitation of cryptographic signature authenticating the identity of the local peer.

It would have been obvious to the ordinary skill in the art at the time of the invention to modify Kobayashi by adding cryptographic signature authenticating the identity of the local peer, which would provide secure authentication mechanism. One would be motivated to enhance system's security.

7. **Examiner's Note:** Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings

of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in its entirety as potentially teaching of all or part of the claimed invention, as well as the context.

Response to Arguments

8. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Faruk Hamza whose telephone number is 571-272-7969. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached at 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you

Art Unit: 2155

have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 886-217-9197 (toll –free).

Faruk Hamza

Patent Examiner

Group Art Unite 2155

/saleh najjar/

Supervisory Patent Examiner, Art Unit 2155

Application Number**Application/Control No.**

10/619,330

Examiner

FARUK HAMZA

**Applicant(s)/Patent under
Reexamination**

GUO ET AL.

Art Unit

2155